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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/809,512

03/26/2004

Tatsuo Saishu

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8588

22852

7590

04/05/2006

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EXAMINER

BLACKMAN, ROCHELLE ANN J

ART UNIT

PAPER NUMBER

2851

DATE MAILED: 04/05/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/809,512

Applicant(s)

SAISHU ET AL.

Examiner

Rochelle Blackman

Art Unit

2851

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 January 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 2-15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 16, 17 and 21 is/are rejected.
- 7) ☒ Claim(s) 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
 - 2) ☐ Certified copies of the priority documents have been received in Application No. _____.
 - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3/26/04 & 8/10/04</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

Applicant's election of Species I corresponding to claims 1 and 16-21 in the reply filed on January 13, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 16, 17, and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki (U.S. Patent Application Publication No. 2002/0101506).

Regarding claim 1, Suzuki discloses a stereoscopic display device (see FIGS. 1-6) of a one-dimensional integral photography system (see paragraph [0108]), comprising: a display unit (see 405 of FIG. 1, 6 of FIGS. 5 and 6, and paragraph [0048]) and including a display plane in which pixels are arranged flatly in a matrix shape (see L and R of FIGS. 5 and 6, see function of 7 in FIGS. 5 and 6 and see paragraph [0007]); and a parallax barrier (see 3 and 4 of FIG. 5 and see 3 of FIG. 6) including a plurality of apertures or a plurality of lenses and being configured to control directions of rays from

the pixels such that a horizontal disparity is included but a vertical disparity is not included, a horizontal direction pitch of the parallax barrier being integer times a horizontal pitch of the pixels, the display plane of the display unit being divided so as to correspond to elemental images for respective apertures or the lenses of the parallax barrier, and an image subjected to a perspective projection in a fixed viewing distance in a vertical direction and subjected to an orthographic projection in a horizontal direction being divided and arranged for respective columns of the pixels (see paragraphs [009]-[0011]).

Regarding claim 16, Suzuki discloses a detecting mechanism (see 402 of FIGS. 1 and 3) which detects an out-of-viewing zone to the display plane in up and down or front and rear directions.

Regarding claim 17, Suzuki discloses the detecting mechanism is a vertical direction indicator (see paragraphs [0024], [0025], [0108], and [0109]).

Regarding claim 21, the “stereoscopic display method of a one-dimensional integral photography system” is similarly met by the features and functions of the above-recited elements for the “stereoscopic display device of a one-dimensional integral photography system” of claims 1, 16, and 17.

Allowable Subject Matter

1. Claims 18-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
2. The following is a statement of reasons for the indication of allowable subject matter:

Claim 18 has been found to be allowable because the prior art of record either alone or in combination neither discloses nor makes obvious the stereoscopic display device comprising the particular feature of the vertical direction indicator having a cyclic structure in a vertical direction, in combination with the particular combination of features recited in claims 1, 16, and 17.

Claims 19 and 20 have been found to be allowable because the prior art of record either alone or in combination neither discloses nor makes obvious the stereoscopic display device comprising the particular feature of the detecting mechanism having a blind structure, in combination with the particular combination of features recited in claims 1 and 16.

Conclusion

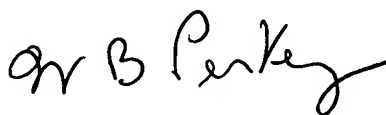
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Isono et al. (U.s. Patent No. 5, 315,377), Three-Dimensional Image Display using Electrically Generated Parallax Barrier stripes: see FIG. 6F.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Rochelle Blackman whose telephone number is (571) 272-2113. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Nguyen can be reached on (571) 272-2258. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read "W B Perkey".

RB

William Perkey
Primary Examiner